Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for determining sleep stages of an examinee, the method comprising:

detecting signals of the examinee with a biosignal detector;

by gain-controlling the detected signals such that amplitude of the detected signals does not exceed an upper limit threshold or is not below a lower limit threshold;

calculating a signal strength variance value that indicates variation of a signal strength of the detected signals the calculated signal strength; and

determining a sleep stage by using the signal strength variance value or a value derived from the signal strength variance value as an indicator value.

- 2. (Previously Presented) The method for determining sleep stages of an examinee according to claim 1, wherein the indicator value is the signal strength variance value detected in a predetermined time period.
- 3. (Previously Presented) The method for determining sleep stages of an examinee according to claim 1, wherein the indicator value is a signal of a difference between the signal strength variance value detected in a predetermined time period and a moving average of the variance value.
- 4. (Previously Presented) The method for determining sleep stages of an examinee according to claim 1, wherein the indicator value is a moving average calculated from the signal strength variance value detected in a predetermined time period.
- 5. (Previously Presented) The method for determining sleep stages of an examinee according to claim 1, wherein a signal strength variance signal value obtained by

removing abnormal values from the signal strength variance value or a value derived from the signal strength variance value is used as the indicator value.

- 6. (Canceled)
- 7. (Previously Presented) The method for determining sleep stages of an examinee according to claim 1, wherein the biosignal detector is a non-invasive biosignal detector.
- 8. (Previously Presented) The method for determining sleep stages of an examinee according to claim 7, wherein the biosignal detector comprises:
 - a pressure detection tube
 - a pressure detection sensor; and
- a biosignal extractor, wherein the biosignal extractor extracts biosignals from a pressure variation detected by the pressure detection sensor.
- 9. (Previously Presented) The method for determining sleep stages of an examinee according to claim 1, wherein the biosignal detector is a heartbeat signal detector, such as at least one of an electrocardiograph and a pulse rate meter.